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Understanding the E-learning provider's Strategies for Achieving Competitiveness

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ABSTRACT

Background: E-learning providers (ELPs) have experienced tremendous growths by advances in technology and mixture of latest information and communication technologies such as intranet, internet, interactive TV and satellite. According to resource-based theory, firm achieve growth because they have competitive; and firms achieve competitiveness by accessing and exploiting unique resources. E-learning providers (ELPs) have experienced tremendous growths by advances in technology and mixture of latest information and communication technologies such as intranet, internet, interactive TV and satellite. According to resource-based theory, firm achieve growth because they have competitive; and firms achieve competitiveness by accessing and exploiting unique resources. **Objective:** This research applied resource-based theory to understand the competitive advantage of ELPs. The research explains what and how e-learning resources are acquired and accessed by ELPs to achieve competitive advantages. **Results:** The results uncover that physical, information, knowledge and organizational resources are acquired and accessed by the e-learning provider. This is a novel attempt to initiate constructs of e-learning resources. The findings also verified that these resources are extended, developed and integrated and determine explanatory factors of e-learning competitive advantage. **Conclusion:** It highlights the needs for ELPs managers to focus on developing their resources to achieve competitiveness, and further integrate their resources to enhance innovation capability for innovative e-learning activity and operations.

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INTRODUCTION

E-learning education has become a significant demand in the world of education today. It has been seen a lifelong learning in delivering knowledge and information via information and communication technology (ICT) (Welsh *et al.*, 2003). The E-learning providers (ELPs) have been seen experiencing growth due to the general growth in knowledge-based workers, the demand for higher education and advances degree but not all ELPs achieve the same rates of growth. Furthermore, not all users satisfied with the services provided by their ELPs. Thus E-learning services are still facing with limited resources and capabilities due to rapid advanced technology.

What ELPs needs are theories and solutions that lead to sustainable competitive advantage but literature of e-learning has not addressed these needs (Smith, 2007). Although some literatures explore success and failure factors of e-learning, there is a need for more understanding of the means for ELPs to achieve competitive advantages. Furthermore, much of the e-learning literature has been exploratory in nature; it has largely lacked of the development of theoretical-driven model and hypothesis, not to mention its application to the practitioners.

In reality, the growths of ELPs have been achieved via a mixture of continuous improvement (Clarke *et al.*, 2005). These attempts represent a way to acquire resources to achieve competitive advantage. According to resource-based view (RBV), a firm is a collection of heterogeneous resources, factors of production or bundles of resources or inputs that allow a firm to perform an operations and activities and execute strategies (Penrose, 1959, Wernerfelt, 1984, Barney, 1991). For example, in ELPs, resources and capabilities are considered the basic element or prerequisite for the operations and development of e-learning activity and process; and the requirement for building up an e-learning. Hence RBV provides a key theoretical foundation for the ELPs' competitive advantages. This research attempts to collect empirical evidences which explain the competitiveness

of ELPs' based on RBV. Based on the case study of ELP, this research investigates what and how e-learning resources are accessed to achieve competitive advantage.

Literature Review:

Due to the advancement of ICT in Malaysia, various universities and colleagues have been shifting to e-learning education. E-learning education have made distance and life-long learning possible, practical and profitable (Smith, 2007). This type of learning highly depends on or is enhanced by online communication using the latest information and communication technologies (Nagy, 2005). Further, technology in teaching and learning has been marketed or presented to its intended market with a lot of promises, benefits and opportunities (Njenga and Fourie, 2010).

There are various definitions provided by the scholar on defining e-learning, some view e-learning takes place anytime someone uses electronic means for gathering information that is acquired without another live person present (Collins *et al.*, 2003). Beamish *et al.* (2002, p. 105 in Horman and Macpherson, 2005) define e-learning as "a wider set of applications and processes allied to training and learning that includes computer-based learning, online learning, virtual classrooms and digital collaboration. These services can be delivered by a variety of electronic media, including the intranet, internet, interactive TV and satellite." Meanwhile, Welsh *et al.* (2003, p. 246) stated that "e-learning as the use of computer network technology, primarily over an intranet or through the internet, to deliver information and instruction to individuals." In the context of this paper, the e-learning allows the ELPs to extend knowledge to learn by using ICT as such the learning provider is separated from the learner by cyberspace (Hamid, 2002).

The growth and competitiveness of ELPs is one of the less explored research areas in e-learning. Literature which focuses on e-learning competitive advantage has suggested the following competitive factors for the ELPs, i.e. customer satisfaction (Sun *et al.*, 2006), continuous improvement (Clarke *et al.*, 2005) and interactions as felt by e-learners. The study

by Jones and O'shea (2004) pointed possible resource and capability for e-learning was mobilize staff, organizational, ICT investment, government and stakeholders support, and change management. Others suggested technology and computer skills (Tsai, 2009); financial, human and technical (Garrison and Kanuka, 2004); technology, corporate environment and delivery method (Macpherson *et al.*, 2004); technological development and knowledge to be shared (Gasco *et al.*, 2004); human resource functions and knowledge management (Efimova and Swaak, 2002); and software development and support process improvement (Marshall and Mitchell, 2002) as resources and capabilities for e-learning but there is inadequate evidence which resources have linkages to competitive advantage.

Some ELPs purposely acquire some asset-based strategy for competitive advantage. The term resources had been defined as the input or factors available to a company through which it performs its operations or carries out its activities. The generic definition includes resources of different kinds, physical, employee skills, patent, productive teams, etc. (Carmelo-Ordaz *et al.*, 2003). On the other hand, Crook *et al.* (2008) claimed strategic resources meet certain criteria – it is valuable, such that it reduces costs or increase value to customers, rare enough that competitors do not use the same resource to compete away the value, and difficult to imitate or substitute, which keeps competitors from gaining parity. Resources can be defined as tangible and intangible entities available to the firm that enable it to offer services efficiently and effectively. Physical plant, equipment, finance, human, organization, stock, land, debtor can be classified as tangible resources; while intangible resources are for example information, knowledge, competence, trademark, patent, and relationship..

According to the strategy literature, the RBV theory is one of the fundamental principles for the competitive advantage of a firm. The RBV literature considers a firm as a collection of heterogeneous resources, or factors of production or as bundles of resources including all inputs that allow a firm to operate and implement its strategies (Penrose, 1959; Wernerfelt, 1984; Barney, 1991). The RBV of the firm posits that a firm's internal processes create a resource bundle which can become the means of creating and sustaining a competitive advantage (Bates and Flynn, 1995). However, very little empirical work on the relationship between firm resources and capabilities and performance has been conducted (Barney and Clark, 2007). Thus it is difficult to know, among all the resources and capabilities controlled by a firm, which of them might ultimately turn out to generate sustained competitive advantage (Barney and Clark, 2007). It is not just necessarily to understand what resources are acquired but also how these resources are bundled together to achieve competitiveness.

Research Methodology:

This research set out the questions: (1) what e-learning resources are accessed by the ELP? (2) How are these resources accessed and (3) How are diverse resources bundled together to achieve competitive advantage. This research is based on the interview findings of five managers from the case of one e-learning provider in Malaysia. The case was selected because it has been recognized and a successful player. It has been established for more than fifteen years of operations with more than fifty experienced full-time employees.

Results:**Question 1: What resources are accessed by the ELP?**

The research unearthed abundance of verifications of the application of resource-based theory by the ELP in practice. ELP resources are segregated into: physical resources, information resources, knowledge resources and organizational resources. The following are the key findings from this research

Physical resources:

This ELP has decided the asset-based strategy because it has acquired more physical resources such as buildings, infrastructure, e-learning hubs and vehicles. The case distinguished physical resources as one of the most essential resources for the reason that it is acquired to support the network coverage advantage, without it this ELP could not tender a wide selection of service portfolios and coverage. Lack of accessibility to physical resources could be an obstacle to profits growth. For example, this ELP generated its profits from mainly central and southern region, but due to limited physical resources (e-learning infrastructure and building) other ELPs experienced disadvantages.

Information resources:

This ELP has made an effort to access to information technology and continuously upgrading its information resources such as it has presented significant technology and maintenance resources which allow communication, transmission and processing of information. For example, hardware, software, peripheral and communication system. Another endeavor in increase information resources is the ICT asset and investment in Web-based information systems, computer platforms, communication technology and software systems

Knowledge resources:

This ELP has also made an effort to acquire human resources with expert knowledge, i.e. skilled people and integrated teams with distinctive technical, knowledge and experience. This ELP has appointed technology experts and acquired and designed e-learning software in order to perform better e-learning network and coverage. This provider even created a "e-learning group" to support the development of knowledge resources for its e-learning solution division. It is the platforms which has been designed and developed by faculty members for the e-learning content instructional design. For example this ELP brings new people with general skills and experience; recruit people with IT specific skills and knowledge and multiple expertise and concrete-experienced.

Organizational resources:

This ELP has competency in providing e-learning because of its strategy, objective, planning and business process. It has made an effort to have competency in the development of the e-learning system by focusing on leadership, management process, customer demand, information, and innovation capability. This ELP has reinforced further in employee involvement and participation in decision making and empowerment. For example the technical staffs are empowered to advance and apply for system development and recovery. Employees execute the ELP's planning and implementation which in turn allows better e-learning system in term of quality and service.

The above verifications show that this ELP has been acquiring diversity of resources together with physical, information, knowledge and organizational resources mainly in the emerging or new advances in technology. It has been effectively in acquiring these resources; this ELP is also one of the leaders in the e-learning. May be some ELPs failed to access some of the above resources, thus did not have wide network coverage and lack of scale in e-learning system and process.

Question 2: How are these resources accessed?

The results prove that this ELP has been uncompromising trade up all resources by devoting in ICT, training and education and continuous improvement. Possession is not the only instrument to access to resources, therefore this ELP has outsourced some of its physical and knowledge resources. It is a popular instrument of acquiring resources by the asset-light ELPs. With this access to physical and knowledge resources (the e-learning space), this ELP managed to provide competitive advantage. This explains that it is not necessary for ELPs to possess their physical resources.

Question 3: How are diverse resources bundled together?

Rationally this ELP has bundled its resources and capabilities by the subsequent strategies.

Acquire and bundle resources:

This ELP acquired resources and bundled them with the obtainable resources to grant superior services. The e-learning contents and training design are integrated together with obtainable resources to offer customized

e-learning solution. For example this ELP consumed its extensive knowledge resources for some of various e-learning platforms from universities and colleges. These innovative capabilities have allowed this ELP to offer better services and enhance new strategies. These justifications suggest that the lack of knowledge and integrated resources could delay competitiveness - one of the reasons why this ELP could compete is that it could offer most active course and best instructional design as compare to other players.

Extend and upgrade IT to integrate internal resources:

This ELP has been focusing on the use of standardized and developed technologies and gradual implementation and maintenance. It resolves more on technical or operational aspects. For example changes in any resources may lead to change in organizational structure, hardware, software and security system requirements, identification of potential users, method to detect specific information needs, system of solutions to detect conflicts from excessive expectations. This ELP has integrated both the technology and maintenance resources for communication, transmission and processing of information. Such capabilities enable its innovation capability in e-learning activity.

Institute management unit:

To provide the best service in e-learning, this ELP establishes a new division to manage IT information in human resource management and distinctively concentrates on training policy and workshop. For example learning management system, using e-learn efficiency, digital content development in e-learning. This ELP also identifies experts on the criteria such as skill, knowledge and experience - such intelligence and insight of individual people have enhanced the ELP's management expertise.

Although this research discovered ways to bundle resources for e-learning, still there are justifications suggesting that most ELPs are stressed for these aspects. This ELP verified that they had found very hard to integrate diverse resources in organizational and knowledge resource since it takes investment in times and funds to build up. There are justifications signifying that most of the ELPs are under pressured in integrations diverse resources and sometimes become difficult to integrate.

Recommendations:

The e-learning market is highly challenging and competitive. ELPs compete by offering a comprehensive range of services. The continuous of value adding services demanded by learners or users have induced ELPs to acquire a wide variety of resources including physical, information, knowledge and organizational resources. Consequently, most ELPs continue to expand and develop their resources.

This analysis ascertains that the asset-light strategy did enhance high profit growth. The case used asset-light strategy achieved good profits growth signifying that the level of resource possession might be the exact descriptive feature for monetary performance. Furthermore, long-term planning for investment in human resources and ICT have assured to high levels of scale in e-learning, less conflict and offer extended services. This is another measure for competitive advantage of e-learning that was not covered in this study.

Conclusion:

Overall, this research extends the resource-based view theory by initiating hypothesis for classify e-learning resources and means to assess resources. It assists to enlighten ELPs' competitive advantages. These empirical justifications gathered so far designated that there are association between e-learning resources and ELP's competitive advantages, the case study of e-learning has been striving to acquire these resources by several instrument with distinct degree. The unreturned question is still how several resources should be integrated to achieve competitive advantage.

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